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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,598	07/01/2002	Shogo Kakiuchi	818330036	3037

26021 7590 05-01/2003
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EXAMINER

CRAWFORD, GENE O

ART UNIT PAPER NUMBER

3651

DATE MAILED: 05/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/089,598

Applicant(s)

KAKIUCHI ET AL.

Examiner

Gene O. Crawford

Art Unit

3651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 6-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 6-15 and 17-24 is/are rejected.
- 7) ☒ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because phrases such as "A conveying apparatus of the invention" and "In accordance with the conveying apparatus of the invention" should be avoided. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 6 is rejected under 35 U.S.C. 102(b) as being anticipated by Kaziura et al.

The aligning and supply apparatus disclosed by Kaziura et al. includes a turntable 14' in which a step portion 19 is provided; a width guide 23 crossing to the step portion 19 in such a manner as to guide the conveyed article from the center side to an outer peripheral side due to rotation of the turn table 14'; a thickness gate 22 arranged in an upper side of the conveyed article passing within said width guide on the turn table, having a projection portion 22 capable of getting down the conveyed article in a high attitude on the step portion without getting down the article in a low attitude at a time when the article moving along the width guide due to the rotation of the turn table rides over the step portion 19 (figure 8).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 7-15 and 17-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaziura et al. in view of Ackley Sr., et al.

The conveying apparatus and method thereof disclosed by Kaziura et al. includes: **(claims 1, 19)** a rotary disc portion having a pair of parallel plates 1, 2 with a region defined therebetween, a gap³ formed on the region between plates 1, 2, a first suctioning device 10, a linear conveying portion having a pair of parallel conveying belts with a gap formed there between (figure 7); **(claims 7, 8 10)** supporting members 26, 27 having a large coefficient of friction and made of rubber positioned in the pair of parallel plate members to hold the article in place (figure 9, column 7, lines 19-22); **(claims 9, 20, 21)** the plate members 1, 2 including grooves 24, 25 around the outer periphery for housing support members 26, 27; (claim 11) a second suctioning device provided between the parallel conveying belts 29; **(claims 12, 22)** a side surface inspection portion T₁₋₃; **(claim 13)** the linear portion including a first conveying portion 41 and a second conveying portion, one end of the second conveying portion being in communication with the other end of the first conveying portion as to further transfer the article; **(claims 14, 15, 23)** further comprising an aligning and supplying apparatus 14 including a turntable and a width guide 23 for supplying the outer peripheral surfaces of

the pair of parallel support members, the aligning and supplying apparatus positioned opposite the first conveying portion; and **(claim 17, 18, 24)** a front surface inspection portion T_{1-3} , a back surface inspection portion T_{4-6} and a sorting portion 42 wherein the articles are sorted in response to results obtained by the inspection portions.

Kaziura et al. discloses both rotary transfer devices and linear transfer devices each having suction means for feeding articles for one point to another in an inspection and sorting operation, but does not disclose the rotary transfer device in combination with the linear conveying portion. It appears inherently obvious from the teachings of Kaziura et al. that one so skilled in the art could use the rotary transfer device X_1 in place of conveyor 41 to feed articles from turntable 14' to the linear conveying portion A disclosed in figure 7. Furthermore, this appears to be a mere rearrangement of the parts disclosed in Kaziura et al. and would have been obvious design choice and expedient in view Ackley Sr. et al. The conveying apparatus of Ackley Sr., et al. includes the broad teaching of providing a rotary suction carrier as a transfer/conveying device in communication with a linear conveying portion (figure 1). It would have been obvious to one of ordinary skill in the art to provide the rotary suction device and method thereof disclosed by Kaziura et al. be in communication with the linear conveying portion to facilitate transfer of articles from one conveying portion to another separate conveying portion opposite the rotary suction device as taught by Ackley Sr., et al.

Allowable Subject Matter

6. Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: the conveying apparatus having a rotary disc portion with two plates and a gap therebetween including the unique feature of an air shutting device positioned between the pair of parallel plate members, the air shutting device having a solid portion for preventing air suctioning' in combination with the rest of the claim language is not taught or fairly suggested by the prior art.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following are cited to show the art with respect to rotary suction devices that feed linear conveying portions: Ackley, Ackley et al., and Yamamoto.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gene O. Crawford whose telephone number is 703/305-9733. The examiner can normally be reached on Monday thru Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Ellis can be reached on 703/308-1113. The fax phone numbers

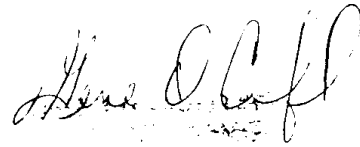
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for the organization where this application or proceeding is assigned are 703/305-3597 for regular communications and 703/305-3597 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703/308-1113.

gc
April 29, 2003

A handwritten signature in black ink, appearing to read "Hend O. Craft", is written over a faint, illegible printed name.